

PROJECT DESCRIPTION
GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 650 (NEW HAMPSHIRE AVENUE) AND US 29 SOUTHBOUND ON-RAMP IN MONTGOMERY COUNTY.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THIS INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 2 NEMA PHASES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE:

PROJECT CONTACTS:

MR. LEE STARKOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
MR. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7338
MR. RALEIGH MEDLEY, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7300
MR. ALICE REBISH, ASSISTANT DISTRICT ENGINEER-UTILITY
PHONE: (301) 513-7300
MR. RICHARD L. DUFF, Sr., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 781-7630
MR. BOBBY GONZALES, TRAFFIC ENGINEER MCDPWT
PHONE: (240) 777-2190

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR USING THE MSHA STANDARD PLATES FOR TRAFFIC CONTROL.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

| CATEGORY CODE NO. | DESCRIPTION | UNITS | QUANTITY |
|-------------------|---|----------------------|-------------------|
| 900000 | BASE MOUNTED (SIZE 6) CABINET (MSHA SPECIFICATIONS) WITH ECONOLITE ASC II 2100 CONTROLLER, SSM 12 E CONFLICT MONITOR, VIDEO INTERFACE EQUIPMENT, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS. | EA | 1 |
| 973023 | FLAT SHEET ALUMINUM SIGNS CONSISTING OF R10-12 (4) (36"x42") R3-1 (30"x30") R3-3 (2) (30"x30") R3-5L (30"x36") | SF EA EA EA | 38 1 1 2 |

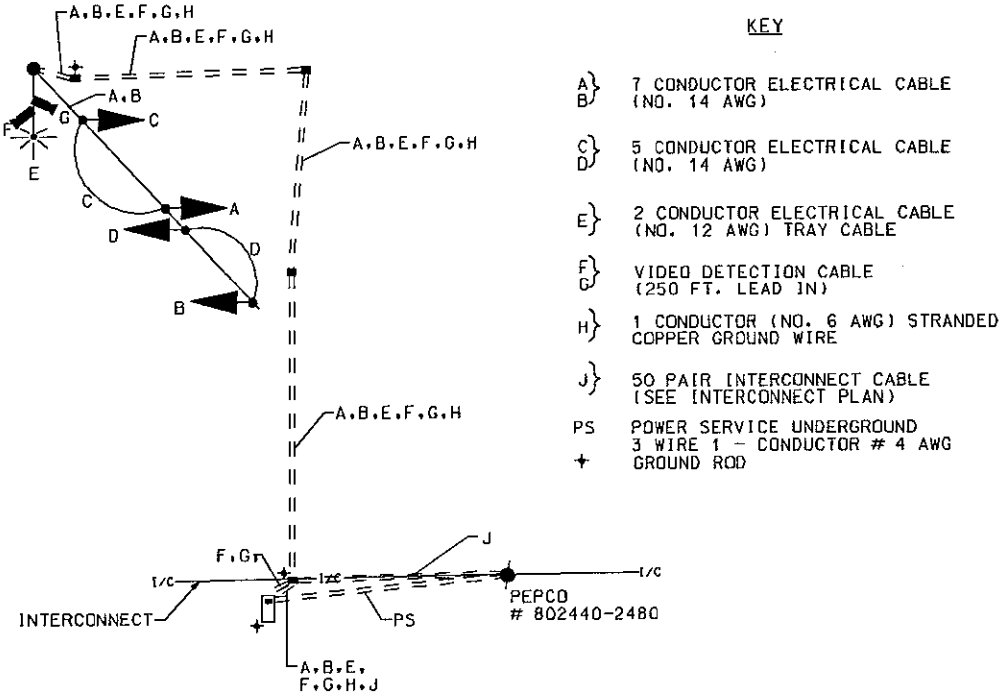
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

| CATEGORY CODE NO. | DESCRIPTION | UNITS | QUANTITY |
|-------------------|---|-------|----------|
| 203030 | TEST PIT EXCAVATION | CY | 2 |
| 585624 | 24 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS | LF | 50 |
| 585620 | 12 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS | LF | 350 |
| 801004 | CONCRETE FOR SIGNAL FOUNDATION | CY | 7 |
| 813015 | INSTALL OVERHEAD SIGN | SF | 38 |
| 805125 | 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED | LF | 70 |
| 805118 | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED | LF | 170 |
| 805135 | 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED | LF | 15 |
| 805140 | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED | LF | 70 |
| 807400 | ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS | EA | 1 |
| 811001 | FURNISH AND INSTALL ELECTRICAL HANDHOLE | EA | 4 |
| 816001 | VIDEO DETECTION CAMERA | EA | 2 |
| 816010 | CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER | EA | 1 |
| 818052 | STEEL POLE WITH SINGLE 70 FOOT MAST ARM | EA | 1 |
| 831010 | 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE WITH PHOTOCELL | EA | 1 |
| 802501 | STRANDED BARE COPPER GROUND WIRE, NO 6 AWG | LF | 250 |
| 837001 | GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH | EA | 3 |
| 860272 | 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION | EA | 12 |
| 861107 | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) | LF | 60 |
| 861108 | ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) | LF | 550 |
| 861116 | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) | LF | 250 |
| 861117 | ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG) | LF | 100 |
| 866101 | 10 FOOT LIGHTING ARM ON SIGNAL STRUCTURE | EA | 1 |
| 871202 | INSTALL CONTROLLER AND CABINET - BASE MOUNT | EA | 1 |
| 800000 | REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT | LS | 1 |

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



PHASE CHART

| | 1 | 2 | 3 | 4 | |
|--------------------|-------|-------|------|------|---|
| | ←R | ←R | R | R | |
| | ←Y | ←Y | Y | Y | |
| | ←G | ←G | G | G | |
| PHASE 1 | ←FL/R | ←FL/R | G | G | ↶ |
| 1 CHANGE | ←R | ←R | Y | Y | ↷ |
| PHASE 2 | ←G | ←G | R | R | ↶ |
| 2 CHANGE | ←Y | ←Y | R | R | ↷ |
| FLASHING OPERATION | FL/R | FL/R | FL/Y | FL/Y | ↶ |

SG 10

ADDENDUM NO. 1
6/4/2003

SABRA, WANG & ASSOCIATES, INC.
1506 10th AVENUE
SUITE 100
BALTIMORE, MD 21227
WWW.SABRA-WANG.COM

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 650 (NEW HAMPSHIRE AVENUE) AND
US 29 SOUTHBOUND ON RAMP

| | | | |
|--------------------|--------------------------|--------------|------------|
| DRAWN BY: S. SMITH | F.A.P. NO. SEE TITLE SEE | TS NO. | SHEET NO. |
| CHECKED BY: NTS | S.H.A. NO. MD9005171 | | |
| SCALE: MARCH 2003 | COUNTY: MONTGOMERY | T.J.M.S. NO. | |
| DATE: MARCH 2003 | LOG MILE: 15065003.65 | | 167 OF 223 |